# Region 1 FY 2013 Invasive Control Program Proposal

### Willamette Valley NWRC

**Oregon White Oak Restoration: North Baskett Butte and Maple Knoll RNA** Baskett Slough NWR, Dallas, OR; and William L. Finley NWR, Corvallis, OR

### Background

In the Willamette Valley, Oregon white oak habitat has declined dramatically in the Willamette Valley since pre-settlement conditions. The largest loss of Oregon white oak habitat is due to forest succession by invading Douglas-fir. Within oak habitats, even though Douglas-fir is a commercially valuable native tree, it is considered highly invasive.

The Willamette Valley National Wildlife Refuge Complex (WVNWRC) holds some of the largest and best examples of oak habitat remaining in the Valley. Baskett Butte, on Baskett Slough NWR, has approximately 276 acres of oak woodland. A management plan prepared in 2005 used detailed plant community delineations to make management recommendations for Baskett Butte, which indicated fir removal was a top priority in all oak habitats. In 2011 the WVNWRC completed an oak restoration project on approximately 70 acres of the North Butte and on adjacent land administered by The Nature Conservancy (partially funded with Regional FY09 invasive allocations).

Maple Knoll Research Natural Area (RNA), located on William L. Finley NWR, was established in 1966 as part of a Federal system of such tracts designated for research and educational purposes. The 100 acres encompassing Maple Knoll is unique because it holds typical examples of both big-leaf maple stands (north slope) and Oregon white oak stands (south slope) found in and adjacent to the Willamette Valley. Douglas-fir is encroaching and out-competing the Oregon white oak such that without removal the site will soon be dominated by Douglas-fir.

### **Project Description**

This proposed project is the initial work needed to preserve the existing oak habitat by eliminating the Douglas fir overstory. Selective cutting of trees using directional falling will occur from locations where the oak are most immediately threatened. On a per acre basis, this will result in complete eradication of Douglas fir. Removal of whole trees from the site will occur as a separate action (covered by partners and/or with other funding sources). When extracted, all logs will be made available for in-stream restoration projects (the Refuge has been providing fish logs to partners for restoration purposes for the past 9 years). Three Watershed Councils will use the logs to make significant contributions to anadromous fish, water quality, and watershed health. Any remaining logs and slash will be utilized for wood products (in stewardship).

This project will result in the eradication of Douglas-fir from all treated acres on both sites (approx 75 acres) and protect the biological integrity of high value Oregon white oak habitat on two NWRs. Oak habitat is considered vital for many migratory birds including several FWS Species of Concern. Without treatment, over 50% of the oak habitats will likely be lost to conifer conversion within 10 years. In addition, the RNA

will be maintained as intended when originally established in 1966. This work is represented in the WVNWRC CCP by Goal 5, Objective 5a:

Maintain up to 489 and 276 acres of oak woodlands on William L. Finley and Baskett Slough Refuges, respectively, for oak woodland-dependent species (e.g., acorn woodpecker, western wood peewee, western gray squirrel).

Under Objective 5, Strategy 4 states; "initiate efforts to remove Douglas fir trees that are over-topping or threaten to overtop existing oaks" (based on priorities in 2005 Baskett Butte Management Plan).

#### **Treatment Area**

Baskett Butte: Acres targeted for fir removal: 45 of approx 200

Maple Knoll: Acres targeted for fir removal: 30 of 100

**Partners/In-Kind Support** (majority of the matching work will occur in future phases i.e. log removal and stream restoration using logs from treatment sites):

USFWS Partners for Fish and Wildlife Program (staff and log use on Partners projects) Bureau of Land Management, Salem District (in-kind prep work with staff foresters) Oregon Department of Fish and Wildlife (stream restoration work with WC's) Watershed Councils- Rickreall Creek, Mary's River, and Long Tom (in-kind services provided to FWS via grant funding)

## **Monitoring Framework**:

Project success will be measured by the changes in conifer crown vegetation, with a goal of zero conifer canopy coverage in the treatment area (documented with pre and post aerial blimp photography).

### **Proposed Budget:**

Plans to 1) obligate all contracts by end of FY13:

2) obligate/spend all FWS staff/detail funds by end of FY13

Proposed project implementation schedule is Summer 2013-Winter 2014.

Falling Contracts	\$22,000
Misc (per diem, equipment)	\$ 3,000
In-house expenditures (FWS or other	\$15,000
detailed staff- project forester/sawyers)	

Invasive Species Project Request Total \$40,000

### **Refuge Point of Contact:**

Jock Beall, Refuge Biologist (541)757-7236 1/31/2013